

524611

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
26 February 2004 (26.02.2004)

PCT

(10) International Publication Number
WO 2004/016326 A1

(51) International Patent Classification⁷: **A63B 53/14**, 53/02

(21) International Application Number:
PCT/NO2003/000277

(22) International Filing Date: 15 August 2003 (15.08.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
20023882 16 August 2002 (16.08.2002) NO

(71) Applicants and
(72) Inventors: **LARSGÅRD, Arnulf** [NO/NO]; Neverveien 7, N-3080 Holmestrand (NO). **KARLSEN, Jon** [NO/NO]; Halvdan Svartes gate 83, N-3186 Horten (NO).

(72) Inventor; and
(75) Inventor/Applicant (for US only): **NILSSON, Johnny** [SE/SE]; Kometvägen 43, S-18348 Täby (SE).

(74) Agent: **HÅMSØ PATENTBYRÅ ANS**; P.O. Box 171, N-4302 Sandnes (NO).

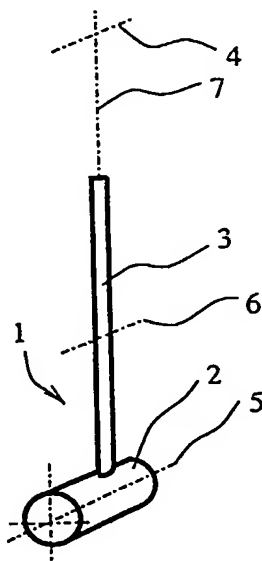
(81) Designated States (*national*): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: GOLF CLUB DEVICE



(57) Abstract: A golf club device, more specially a putter (1), comprising a head (2) and a shaft (3) attached to the head (2), possibly being provided with a grip, wherein the moment of mass inertia of the head (2) constitutes less than seventy-nine per cent of the total moment of inertia of the putter (1) when the putter (1) is rotated about an axis of rotation (4), which is perpendicular to the longitudinal axis (7) of the shaft (3) and about one hundred and twenty centimeters from the longitudinal axis (5) of the head (2), and/or wherein the mass of the shaft, including a possible displaceable weight (11), divided by the length of the shaft is at least one hundred and seventy grams per meter of shaft in a shaft which is up to one meter long, and at least one hundred and ninety grams per meter of shaft in a shaft which is longer than one metre.

WO 2004/016326 A1

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/NO 03/00277

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: A63B 53/14, A63B 53/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: A63B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6213890 B1 (R.P. PRINCE), 10 April 2001 (10.04.01) --	1-4
X	US 4588191 A (D.R. STEWART), 13 May 1986 (13.05.86) --	1-4
X	US 6083116 A (T.C. LOREDO), 4 July 2000 (04.07.00) --	1-4
Y	US 5306008 A (F. KINOSHITA), 26 April 1994 (26.04.94) --	1-4

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

15 October 2003

Date of mailing of the international search report

17-10-2003

Name and mailing address of the ISA/

Swedish Patent Office

Box 5055, S-102 42 STOCKHOLM

Facsimile No. +46 8 666 02 86

Authorized officer

Axel Beks / MRo

Telephone No. +46 8 782 25 00

INTERNATIONAL SEARCH REPORT

Internal application No.

PCT/NO 03/00277

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 0255324 A2 (WILSON SPORTING GOODS COMPANYLIMITED), 3 February 1988 (03.02.88), figure 1 --	3
Y	US 4203598 A (A. STUFF ET AL), 20 May 1980 (20.05.80), figure 4 -- -----	1-2

INTERNATIONAL SEARCH REPORT

Information on patent family members

06/09/03

International application No.

PCT/NO 03/00277

Patent document cited in search report			Publication date	Patent family member(s)			Publication date
US	6213890	B1	10/04/01	NONE			
US	4588191	A	13/05/86	NONE			
US	6083116	A	04/07/00	NONE			
US	5306008	A	26/04/94	NONE			
EP	0255324	A2	03/02/88	GB	2194159	A	02/03/88
				GB	8618300	D	00/00/00
				GB	8717482	D	00/00/00
US	4203598	A	20/05/80	AU	5002479	A	14/02/80
				AU	5049279	A	21/02/80
				AU	8448575	A	10/03/77
				CA	1058239	A	10/07/79
				GB	1526733	A	27/09/78
				GB	1526734	A	27/09/78
				GB	1526735	A	27/09/78
				JP	51077441	A	05/07/76
				US	4058312	A	15/11/77